

ABSTRACT OF THE DISCLOSURE

Disclosed is a gain-controllable wideband optical fiber amplifier for amplifying
5 both C-band and L-band optical signals, which comprises: a first amplifying section
configured to (1) be pumped in at least one direction, (2) amplify both C-band and L-band
optical signals and (3) output an amplified spontaneous emission; an optical attenuator for
attenuating the power of the spontaneous emission; and a second amplifying section
pumped by the attenuated spontaneous emission to secondarily amplify the amplified L -
10 band optical signals.